IN THE CLAIMS:

Please cancel claims 1-3, 9, 30, 35, 41-46, and 48. Claim 6 was canceled in a previous amendment. Please amend claims 4, 5, 7, 8, 10-13, 15, 16, 18-26, 28, 29, 31-34, and 36-40. No new matter is believed to be entered as a result of the foregoing amendments.

1. - 3. **(Canceled)**

4. **(Currently Amended)** ~~The~~ An optical isolator core ~~of claim 3~~, comprising:

a first polarizer having a wedge shape and configured to receive incident light traveling along a path and refract the incident light into o-rays and e-rays, wherein said first polarizer has an optic axis angle of approximately +45° or -45°;

a rotator disposed along the path and configured to rotate the polarization planes of the o-rays and e-rays;

a second polarizer having a wedge shape and disposed along the path after the rotator, ~~wherein said second polarizer has~~ the second polarizer having an optic axis angle of approximately ~~45º~~ 0° or 90° apart from an optical axis of the first polarizer, and the first and second polarizers having approximately the same wedge angle; and

a correction element of birefringent material, disposed along the path and adjacent to a diagonal face of the second polarizer, having a length and an optic axis angle, wherein the length and the correction element optic axis angle compensate~~s~~ for a differential group delay and walk-off introduced by the first and the second polarizers, wherein the correction element includes an optical plane in which said o-rays and said e-rays travel, wherein said optical plane is perpendicular to said optic axis of said second polarizer, and an input face of the correction

element being parallel to an input face of the second polarizer such that the optical plane of the correction element is perpendicular to the optic axis of second polarizer.

5. **(Currently Amended)** The optical isolator core of claim [[1]] 4, wherein a distance traveled by said o-rays and the e-rays through said correction element is equal to the length of the correction element multiplied by the tangent of ~~the~~ angle β.

6. **(Canceled)**

7. **(Currently Amended)** The optical isolator core of claim [[1]] 4, wherein said correction element comprises a single piece of material.

8. **(Currently Amended)** The optical isolator core of claim [[1]] 4, wherein said correction element is configured such that said e-rays and o-rays are refracted such that said e-rays and o-rays intersect at a point proximate to a distal face of said correction element.

9. **(Canceled)**

10. **(Currently Amended)** ~~The~~ An optical isolator ~~of claim 9~~ adapted for receiving light transmitted through the isolator in a forward direction comprising:

a first polarizer having a wedge shape, disposed along a path, configured to separate light incident in the forward direction into at least one o-ray and at least one e-ray;

a polarization rotator disposed along the path;

a second polarizer having a wedge shape and disposed along the path after the polarization rotator; and

a correction element, disposed along the path and adjacent to a diagonal face of the second polarizer, having a length and a crystal optic axis which lies in a plane defined by the at least one e-ray and the at least one o-ray, and having a crystal optic axis angle lying in said plane defined by the at least one e-ray and at the least one o-ray, wherein said at ~~lease~~ least one o-ray and said at least one e-ray travel through said isolator separated by a walk-off distance and the length and the crystal optic axis angle of said correction element ~~is configured~~ cooperate to substantially eliminate said walk-off distance between said at least one o-ray and said at least one e-ray exiting said second polarizer, the length and the crystal optic axis angle also compensate[[s]]ing for differential group delay introduced by the first and the second polarizers, the correction element including an optical plane in which said o-rays and said e-rays travel, and

wherein said optical plane is perpendicular to an optic axis of said second polarizer, and an input face of the correction element being parallel to an input face of the second polarizer such that the optical plane of the correction element is perpendicular to the optic axis of the second polarizer.

11. **(Currently Amended)** The optical isolator of claim [[9]] 10, wherein said correction element is configured to substantially eliminate differential group delay.

12. **(Currently Amended)** The optical isolator of claim [[9]] 10, wherein said first polarizer has a crystal optic axis of approximately ~~+/-45°~~ +45° or -45°.

13. **(Currently Amended)** The optical isolator of claim [[9]] 10, wherein said second polarizer has a crystal optic axis angle of approximately 0° or 90°.

14. **(Original)** The optical isolator of claim 13 wherein said correction element has a crystal optic axis α which lies with the plane defined by said at least one o-ray and said at least one e-ray.

15. **(Currently Amended)** The optical isolator of claim [[9]] 10, wherein said correction element has a length L and a crystal optic axis angle α which are selected such that said at ~~lest~~ least one e-ray is refracted by said correction element such that the respective light ~~pats~~ paths of said at least one e-ray and said at least one o-rays intersect at a location proximate to a face of said correction element.

16. **(Currently Amended)** The optical isolator of claim 15 wherein said at least one o-rays and said at least one e-rays are refracted by said correction element.

17. **(Original)** The optical isolator of claim 15 wherein said at least one o-ray and said at least one e-ray intersect at an angle β.

18. **(Currently Amended)** The optical isolator of claim 15 wherein said at least one o-ray and said at least one e-ray exit said second polarizer separated by a walk-off distance which is approximately equal to said length L of the correction element multiplied by the tangent of an

angle β, said angle β defined by an intersection of said at least on e-ray and said at least one o-ray.

19. **(Currently Amended)** The optical isolator of claim 18 wherein said tangent of said angle β is defined as:

$$\tan(\beta)=\frac{(n_e^2 - n_o^2)\sin(\alpha)\cos(\alpha)}{n_o^2\sin^2\alpha+n_e^2\cos^2\alpha}$$

20. **(Currently Amended)** The optical isolator of claim [[9]] 10, wherein said first polarizer and said second polarizer[[s]] comprise birefringent material.

21. **(Currently Amended)** The optical isolator of claim [[9]] 10, wherein said first polarizer, said polarization rotator, said second polarizer, and said correction element are arranged in a sequence along an axis of said isolator.

22. **(Currently Amended)** An optical isolator adapted for receiving light transmitted through the isolator in a forward direction comprising:

a first polarizer, having a wedge shape and disposed along a path, configured to separate light incident in the forward direction into at least one o-ray and at least one e-ray;

a polarization rotator disposed along the path;

a second polarizer, having a wedge shape and disposed along the path ~~and between the first polarizer and~~ after the polarization rotator, configured to refract the at least one o-ray and at least one e-ray such that they exit said second polarizer in substantially parallel light paths separated by a walk-off distance; and

a correction element, disposed along the path and adjacent to a diagonal face of the second polarizer, having a length and a crystal optic axis which lies in a plane defined by the at least one o-ray and at least one e-ray, and wherein at least one of the at least one o-ray and at least one e-ray exiting the second polarizer are refracted by the correction element such that their respective light paths intersect at an angle β, and wherein the length and the crystal optic axis angle compensate~~s~~ for differential group delay and walk-off introduced by the first and the second polarizers wherein the correction element includes an optical plane in which said o-rays and said e-rays travel, and

wherein said optical plane is perpendicular to ~~said~~ an optic axis of said second polarizer, and an input face of the correction element being parallel to an input face of the second polarizer such that the optical plane of the correction element is perpendicular to the optic axis of the second polarizer.

23. **(Currently Amended)** The optical isolator of claim 22 wherein said correction element is configured to substantially eliminate said walk-off distance between said at least one o-ray and said at least one e-ray exiting said second polarizer.

24. **(Currently Amended)** The optical isolator of claim 22 wherein said correction element is configured to substantially eliminate said differential group delay.

25. **(Currently Amended)** The optical isolator of claim 22 wherein said first polarizer has a crystal optic axis angle of approximately ~~+/-45º~~ +45° or -45° relative to a vertical edge of the first polarizer.

26. **(Currently Amended)** The optical isolator of claim 22 wherein said second polarizer has a crystal optic axis angle of approximately 0° or 90° relative to ~~a~~ said vertical edge of the second polarizer.

27. **(Original)** The optical isolator of claim 22 wherein said polarization rotator comprises a 45° Faraday rotator.

28. **(Currently Amended)** The optical isolator of claim 22 wherein said correction element has a length L and a crystal optic axis cutting angle α which are selected such that said at least one o-ray or said at least one e-ray ~~are~~ is refracted by said correction element such that their respective light paths intersect at a location proximate to a face of said correction element.

29. **(Currently Amended)** The optical isolator of claim 22 wherein ~~both of~~ said at least one o-ray ~~or~~ and said at least one e-ray are refracted by said correction element.

30. **(Canceled)**.

31. **(Currently Amended)** The optical isolator of claim 22 wherein said at least one o-ray and said at least one e-ray exit said second polarizer separated by a walk-off distance which is approximately equal to said length L multiplied by the tangent of said angle β.

32. **(Currently Amended)** The optical isolator of claim 31 wherein said tangent of said angle β is defined as:

$$\tan(\beta)=\frac{(n_e^2-n_o^2)\sin(\alpha)\cos(\alpha)}{n_o^2\sin^2\alpha+n_e^2\cos^2\alpha}$$

33. **(Currently Amended)** The optical isolator of claim 22, wherein said first polarizer and said second polarizer comprise birefringent material.

34. **(Currently Amended)** The optical isolator of claim 22, wherein said first polarizer, said polarization rotator, said second polarizer, and said correction element are arranged in a sequence along an axis of said optical isolator.

35. **(Canceled)**

36. **(Currently Amended)** A method for receiving light passing through an optical isolator in a forward direction through the isolator comprising ~~The method of claim 35~~

providing a first polarizer, having a wedge shape and disposed along a path, configured to separate light incident in the forward direction into at least one o-ray and at least one e-ray;

providing a polarization rotator disposed along the path;

providing a second polarizer, having a wedge shape and disposed along the path after the polarization rotator, configured to refract the at least one o-ray and at least one e-ray such that they exit second polarizer in substantially parallel light paths separated by a walk-off distance; and

providing a correction element, disposed along the path and adjacent to a diagonal face of the second polarizer,

separating the light traveling in a forward direction into at least one o-ray and at least one e-ray;

rotating the polarization of the at least one o-ray and the at least one e-ray;

refracting the at least one o-ray and the at least one e-ray such that they are in substantially parallel paths;

passing the at least one o-ray and the at least one e-ray through the correction elements having an optic axis in a plane defined by the substantially parallel paths and a length which compensates for differential group delay and which also ~~wherein said correction element is configured to~~ substantially eliminates said walk-off distance ~~between said at least one o-ray and at least one e-ray exiting said second polarizer~~ introduced by the separating and refracting, wherein the correction element includes an optical plane in which said o-rays and said e-rays travel, wherein said optical plane is perpendicular to an optic axis of said second polarizer, and an input face of the correction element being parallel to an input face of the second polarizer such that the optical plane of the correction element is perpendicular to the optic axis of the second polarizer.

37. **(Currently Amended)** The method of claim [[35]] 36, wherein said correction element is configured to substantially eliminate ~~the~~ first order polarization mode dispersion.

38. **(Currently Amended)** The method of claim [[35]] 36, wherein said correction element has a length L and a crystal optic axis cutting angle α which are selected such that said at

least one o-ray and said at least one e-ray are refracted by said correction element such that ~~their respective~~ said light paths intersect at a location proximate to a face of said correction element.

39. **(Currently Amended)** The method of claim 38 wherein said at least one o-ray and said at least one e-ray are separated by [[a]] said walk off distance which is approximately equal to said length L multiplied by the tangent of an angle β.

40. **(Currently Amended)** The method of claim 39 wherein said tangent of said angle β is defined as:

$$\tan(\beta)=\frac{(n_e^2-n_o^2)\sin(\alpha)\cos(\alpha)}{n_o^2\sin^2\alpha+n_e^2\cos^2\alpha}$$

41. - 46. **(Canceled)**

47. **(Previously Added)** The method of claim 37 wherein the first order polarization mode dispersion is a differential group delay.

48. **(Canceled)**

IN THE DRAWINGS:

The Examiner has objected to the drawings for allegedly failing to show "the first polarizer having an optic axis of plus or minus 45 degrees." In this regard, the Examiner has proposed that "polarizer 206, shown in Fig. 2, be amended to properly illustrate γ_1 having an optic axis angle of 45 degrees."

Responsive to the objection posed by the Examiner, Applicant has amended Fig. 2 to indicate that some embodiments of the invention incorporate a γ_1 having an optic axis angle of about 45 degrees. A redline markup of Fig. 2 reflecting the aforementioned proposed drawing change is enclosed herewith for the consideration of the Examiner.

In view of the foregoing, Applicant respectfully submits that the objection of the Examiner concerning the drawings has been overcome and should, accordingly, be withdrawn.